

**Taxonomic notes.**—BAILEY<sup>8</sup> has published in advance some of the changes in nomenclature that will appear in the *Standard Cyclopaedia of Horticulture*. The changes selected for publication involve the names of 100 species and varieties, and some of the changes affect North American species. For example, the retention of *Malus* in *Pyrus* involves changes in 24 names; while a new interpretation of *Statice* as contrasted with *Limonium* calls for changes in 43 names. The author pays his respects to a certain type of taxonomic work as follows: "It has been the desire, in the compilation of the cyclopaedia, to accept new generic limitations with caution. The temper of the present times is to find differences, as opposed to the tendency of the immediately preceding workers to find agreements. The analytic intention is the mark of systematic work in this generation, as the synthetic intention was the mark of the past generation. There is reason to expect a return from the method of disunion to the method of relationships; and as a work designed for the use of horticulturalists, who cannot be skilled in bibliography and pedantry, should be conservative, I have thought it best, so far as possible, to avoid unnecessary and fantastic sub-divisions."

CONARD<sup>9</sup> has revived the discussion concerning certain generic names of our water lilies. With the help of even the more conservative manuals, we were accustoming ourselves to say *Castalia* when we thought of *Nymphaea*, and to say *Nymphaea* when we thought of *Nuphar*. Now CONARD has shown that the valid generic name for the white water lilies is *Nymphaea* after all, and for the yellow pond lilies is *Nuphar*.

FERNALD<sup>10</sup> has discussed the species of *Sabatia* usually recognized as occurring in New England, and has described a new species (*S. Kennedyana*) occurring in Massachusetts and Rhode Island.—J. M. C.

**Life cycles of bacteria.**—LÖHNIS and SMITH,<sup>11</sup> in a preliminary communication, present some of their conclusions from a study of 42 strains of bacteria. All of these strains showed life cycles "not less complicated than those of other microorganisms"; and the authors are inclined to believe that this may be true of all species of bacteria. The forms studied live alternately in an organized and in an amorphous stage, the latter being called a "symplastic" stage, because in this stage the separate cells undergo "a thorough mixing." From this "sympiasm" new individual cells arise in various ways. In all cases what are called "regenerative units" become visible, which increase in size, and

<sup>8</sup> BAILEY, L. H., Nomenclatorial transfers. *Rhodora* 18:152-160. 1916.

<sup>9</sup> CONARD, HENRY S., *Nymphaea* and *Nuphar* again. *Rhodora* 18:161-164. 1916.

<sup>10</sup> FERNALD, M. L., The genus *Sabatia* in New England. *Rhodora* 18:145-152. pl. 121. 1916.

<sup>11</sup> LÖHNIS, F., and SMITH, N. R., Life cycles of the bacteria. *Jour. Agric. Research* 6:675-702. pls. 1-7. fig. 1. 1916.